

# Professional Competencies and Skills: Which are the most relevant for the performance of newly graduated Accountants?

## Competências e Habilidades Profissionais: Quais São as Mais Relevantes para o Desempenho de Egressos do Curso de Ciências Contábeis?

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### RESUMO

O objetivo deste trabalho é verificar quais são as competências e habilidades profissionais mais relevantes para o desempenho de egressos do curso de Ciências Contábeis na transição universidade-empresa e o que se pode realizar no campo pedagógico para desenvolvê-las de forma mais efetiva. Mediante aplicação de questionário, foram ouvidos 442 egressos do curso de Ciências Contábeis de quatro instituições de ensino superior do estado da Bahia, no ano de 2020. Os dados foram analisados com o apoio da Regressão Logística, operacionalizada por meio do software SPSS®, a fim de identificar as habilidades e competências profissionais que exercem maior impacto sobre o desempenho dos egressos acima referidos. Verificou-se que a probabilidade de o egresso experimentar êxito ou fracasso na transição universidade-empresa depende, principalmente, de conhecimentos em comunicação e expressão e em contabilidade financeira. Constatou-se, ainda, que as principais dificuldades enfrentadas pelos egressos na transição universidade-empresa estão relacionadas com competências de natureza comunicacional. Na segunda fase da pesquisa, os resultados foram submetidos à apreciação do Núcleo Docente Estruturante (NDE) do Curso de Ciências Contábeis ofertado pelas instituições de ensino que participaram do estudo, objetivando identificar lacunas de formação acadêmica, bem como estratégias reparadoras. Com efeito, considerou-se que tais dificuldades poderiam ser evitadas ou minimizadas com maior exposição do aluno a disciplinas de natureza linguística, tais como Semiótica, Comunicação Empresarial e Português Instrumental. Espera-se, desse modo, fornecer subsídios para avaliação e adequação de projetos pedagógicos do curso de Ciências Contábeis, bem como fomentar o debate acerca da necessidade de atualizar as respectivas diretrizes curriculares.

**Palavras-chave:** Competências e habilidades profissionais. Egressos de Ciências Contábeis. Transição universidade-empresa.

### ABSTRACT

The objective of this work is to verify which are the most relevant competences and professional skills for the performance of graduates of the Accounting in the university- company transition and what can be done in the pedagogical field to develop them more effectively. Through the application of a questionnaire, 442 graduates of the Accounting from four higher education institutions in the state of Bahia were heard, in the year 2020. The data were analyzed with the support of Logistic Regression, operationalized through the SPSS® software, in order to identify the professional skills and competences that have the greatest impact on the

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performance of the aforementioned graduates. It was verified that the probability of the graduate experiencing success or failure in the university-industry transition mainly depends on knowledge in communication and expression and in financial accounting. It was also found that the main difficulties faced by graduates in the university-company transition are related to communication skills. In the second phase of the research, the results were submitted to the Structuring Teaching Nucleus (NDE) of the Accounting course offered by the educational institutions that participated in the study, aiming to identify gaps in academic training, as well as repairing strategies. Indeed, it was considered that such difficulties could be avoided or minimized with greater exposure of the student to subjects of a linguistic nature, such as Semiotics, Business Communication and Instrumental Portuguese. It is expected, in this way, to provide subsidies for the evaluation and adequacy of pedagogical projects of the Accounting, as well as to foment the debate about the need to update the respective curricular guidelines.

**Keywords:** Professional skills and abilities. Graduates of Accounting Sciences. University- business transition.

## 1. Introduction

Among academics and market agents, there seems to be a consensus that recent socioeconomic transformations have generated new opportunities for the professions, but also great challenges. In the new economic order, in practically all areas of knowledge, the value of the professional has been measured by the ability to adapt to changes, the flexibility to innovate and learn continuously, communication skills, and the ability to work in teams and exercise leadership. In the so-called era of uncertainty, it has never been so difficult to predict what the job market will really demand from each profession, not least because many will undergo radical changes and others will continue on a path to extinction. However, studies presented at the World Economic Forum (2018) suggest that, in any scenario, among the most valued professional attributes will be creativity, communication skills, persuasion, negotiation skills, critical thinking, resilience, and flexibility.

A quick foray into world economic history suggests that the demand for new professional skills will recur and therefore will not find in current technological advances a watershed after which the labor market will settle. If in the past machines began to compete with humans in physical skills, making certain trades dispensable, today this threat comes from information technologies, reinforced by biotechnology. At the rate at which robotics is evolving, it is worth conjecturing that in the future an oncologist will be less effective at preventing cancer than a set of computers working in a network. This rupture does not mean, however, that professionals such as accountants will lose space in society, but that they will inexorably need to acquire new skills to perform new roles. When man began to be replaced by machines in agriculture and industry, new jobs emerged that demanded cognitive skills that were the exclusive domain of humans: learning, analyzing, communicating and above all understanding human emotions (HARARI, 2018). At international level, various organizations have been speaking out about the need to invest in the development of new professional skills. The International Labor Organization (ILO, 2015), for example, warns that this is one of the greatest challenges facing countries, companies and people around the world today. It is highlighted that the acquisition of new skills is a critical factor for employability, economic growth and social inclusion. In the same document, the ILO

It warns that without adequate investment in the development of new skills, many people will be excluded, employment opportunities created by technological advances will not be able to be exploited, and countries will struggle to compete in globalized markets.

In the accounting area, specifically, there are several studies and organizations that recognize the need to stimulate the development of new professional skills, including communication, so that the accountant can meet the demands of the market. In fact, more than three decades ago, with a keen perception that the world would soon undergo major socioeconomic transformations, in our country some authors have already expressed concern about the training of accountants. This is what can be observed, for example, in the following inquiries by Iudicibus and Marion (1986, p.51):

Are accounting schools fulfilling their function of adapting teaching to the requirements of the field of professional accounting advancement? Are these schools taking care of the curriculum, teaching laboratory, research, teachers, teaching methodology, didactic and support material etc. com the objective of improving the level of education?

As noted, the idea that the accountant needs to acquire skills that allow him to act not only as a provider of accounting reports, but also as a participant in business management, has long been defended. Recommendations of this nature can be found in several pronouncements of entities linked to accounting. At the international level, we initially highlight the document entitled *Core Competency Framework*, organized by the *American Institute of Certified Public Accountants* (AICPA, 2018). In this document, the competencies were classified into the following categories: a) functional competencies; b) personal skills; c) business-related skills. In the field of personal skills, the AICPA includes communication, highlighting its contribution to the effectiveness of the role of listening and providing information in various formats to the target audience.

Similarly, the *International Federation of Partners* (IFAC, 2010) has also organized and disseminated a framework of competences, including interpersonal and communication skills. In doing so, this body highlights the role of communication as an important element for professionals to be able to dialogue with other areas of knowledge, work as a team, receive and transmit information, make judgments and make decisions. This example was followed by the *Institute of Management Accountants* (IMA, 2019), given that this body also included communication skills in the framework of competencies essential to the accountant's good performance. This initiative was motivated by the understanding that this professional needs to adapt their communication strategies to the cultural diversity of accounting users, use information technologies in accordance with the standards in force in each context and with the preferences of clients, communicate positive and negative results with sensitivity, motivate people, listen and question efficiently.

In Brazil, it was up to Resolution No. 10/2004 of the National Council of Education, which instituted the Curricular Guidelines for the Accounting Sciences Course, to define the skills and competencies necessary for the training of accountants. As expected, so are communication skills

occupy a prominent position in the aforementioned document. The Guidelines expressly provide that, firstly, the course must guarantee the accountant the necessary training for the proper use of the terminology and language of Accounting and Actuarial Sciences. Subsequently, the aforementioned resolution establishes that the accountant must demonstrate a systemic and interdisciplinary view of the accounting activity, prepare opinions and reports that contribute to the efficient and effective performance of its users, whatever the organizational models. As can be seen, the Curricular Guidelines mentioned here contemplate skills and abilities that cannot be acquired only with specific knowledge of accounting, finance and related disciplines. In order for the future accountant to become proficient in the use of accounting language or to be able to work in a team, lead, motivate people, resolve conflicts, consider the cultural diversity of accounting users and dialogue with *stakeholders*, he needs to acquire a much broader set of knowledge.

Despite this, when referring to the curricular contents of basic training that should be considered in the composition of pedagogical projects, the Guidelines in question do not make explicit mention of disciplines such as Business Communication, Semiotics, Portuguese Language, and much less foreign ones. When referring to the contents of basic training (Art. 5, Item I), the aforementioned resolution recommends that pedagogical projects incorporate "studies related to other areas of knowledge, especially Administration, Economics, Law, Quantitative Methods, Mathematics and Statistics". As noted, although the document refers to other areas of knowledge, at no time does it mention disciplines that can stimulate the development of communication skills. By the way, it should be noted that the Federal Accounting Council has already been making efforts to amend the aforementioned Resolution No. 10/2004.

In view of the above and considering that, in the current conjuncture, professionals in general tend to be more demanded with regard to competencies and skills dependent on multidisciplinary knowledge, as suggested by the various studies mentioned above, this work is aimed at answering the following question: What are the most relevant professional competencies and skills for the performance of graduates of the Accounting Sciences course in the university-to-company transition and what can be done in the pedagogical field, to develop them more effectively? Thus, the main objective of this research is to identify the most relevant professional skills and competencies for the performance of accounting graduates in the transition from the university to the corporate world and what can be done, in the pedagogical field, to help develop them.

In a context in which the academic community resumes the debate on the professional profile of accountants, especially with regard to skills, competencies and the content of the national curriculum guidelines of the Accounting Sciences course, this research presents itself as a relevant contribution to support and guide this discussion. In addition, to the extent that it points out the greatest difficulties presented by the graduates, it is believed that the study in question can provide important contributions to the evaluation and reformulation of pedagogical projects of the aforementioned course. In addition, since in Brazil there are still few studies that are responsible for investigating possible relationships between the education of graduates of the Accounting course and the difficulties they face in the transition from university to business, it is hoped that this work can contribute to stimulate new research and, thus, expand the frontiers of knowledge.

In addition to this introductory section, the work is composed of four more segments. In the second, the grounds are presented

Theoretical, accompanied by some examples of applications of semiotics. In the third, the methodological procedures adopted are listed. The fourth segment is dedicated to the presentation and discussion of the results achieved. Finally, the final considerations, the limitations identified, and the recommendations for future research are discussed.

## 2. Theoretical Basis

### 2.1 Semiotics: a resource for the development of professional skills and abilities.

A brief incursion into the specialized literature leads us to conclude that Semiotics has generally been defined as the science that is dedicated to the study of all signs, whether linguistic or not. The sign, in turn, can be defined as anything that, under a certain aspect or circumstance, represents something to someone (PEIRCE, 1999). According to Eco (2000), a sign is everything that, on the basis of a previously accepted social convention, can be understood as something that is in the place of something else. As Santaella (2000) teaches us, at this point it is important to clarify that the object of the sign is not necessarily what we conceive as an individual and concrete "thing". On the contrary, the sign can be a palpable element or a set of elements, but also events, ideas or simply an abstraction. Generalizing, we could affirm that a sign is everything that can touch human consciousness, as long as it has the potential to awaken some meaning in it (MORRIS, 1976).

Peirce (1999), considered the founder of modern semiotics, conceives this discipline as a general and abstract theory capable of explaining all the behavior of signs. According to Nöth (1995), the starting point of Peirce's theory of signs is the axiom that cognitions, ideas and even man are essentially semiotic entities. This author points out that, according to Peirce, the world is so impregnated with signs that the Semiotic itself assumes a universal character. In emphasizing the potential application of this science, Peirce himself declares that he has never conceived the study of any area, be it mathematics, ethics, metaphysics, gravitation, astronomy, psychology, phonetics, economics, history of science, or other disciplines, except as investigations of semiotic nature.

(Nöth, 1995). Sharing this view, Santaella (2000) states that all thought is processed through signs and that, therefore, semiosis is synonymous with thought, intelligence, mind, growth, learning and life.

Morris (1976) also considers that semiotics can assume great importance in a program of unification of the sciences, even if "the exact nature and extent of this unification remain to be determined." According to this author, this can occur to the extent that this discipline is used as an instrument to improve the language of the sciences. This view is based on the fact that Semiotics provides a general language applicable to any language or special sign, including that of the sciences, and that nothing can be studied without signs that denote the objects of the field to be studied. Also, according to Morris (1976), Semiotics has a double relationship with the sciences. It is both an autonomous science and an instrument of the sciences, since it provides the basis for all disciplines that are dedicated to the study of signs, such as linguistics, logic, mathematics, and rhetoric.

As Semiotics is the branch of knowledge that deals with the study of all languages, establishing parameters to guide and evaluate communication practices, especially with regard to meaning, reference and representation, this discipline has been widely used in several areas

Professionals. In Law, for example, the introduction of the discipline Legal Semiotics in the curriculum of this course stems from the need to equip the future lawyer to construct and express the legal discourse, carefully analyzing the meaning of the terminology used and bearing in mind that the effective application of the rules presupposes a rigorous interpretative process. Thus, semiotics ends up functioning as a kind of tool capable of instructing and evaluating the very methods of investigation and interpretation of legal phenomena. According to Araújo (2017), as it is a science that deals with languages and studies all forms of manifestation of culture, the application of semiotics as a technique for investigating the legal universe is an excellent and contemporary heuristic instrument.

In the field of medicine, there are also multiple applications of Semiotics. The most common are the study of symptoms and symptoms associated with various pathologies, with the objective of constructing diagnoses and prognosis. As Silveira (2005) teaches us, from the point of view of Semiotics, medical diagnosis is a dialogical process that is established between doctor and patient through a diagram in which the phenomenological categories proposed by Peirce (1999) act as indicative vectors of the various activities and experiences that make up this process. Another example of the application of this field of study in the area of health can be observed in the process of construction and dissemination of educational campaigns. In general, it is considered that its conceptual framework can not only support medical research, but also assist in the operationalization of preventive campaigns aimed at the community.

In pedagogy, concepts and principles derived from semiotics have also been used as an instrument to support the teaching of reading, facilitating the analysis and understanding of the internal structure of the text and its external components. With the support of Semiotics, students become more prepared to understand the text as an object of a cultural nature, which is inserted in a certain context, from which it becomes possible to recover its full meaning and attribute meanings to it. According to Barros (2000), the text needs to be examined in relation to the socio-historical context that surrounds it and, ultimately, gives it meaning. To this end, relying on methodologies provided by Semiotics, the student is encouraged to develop not only skills in understanding the text itself, but also to expand their linguistic universe, the ability to reflect, generate ideas and, finally, understand what the text says and how it says it.

Considering that this field of knowledge offers methodological resources for a broader understanding of the phenomena that surround us, it is natural that it also finds applications in architecture. After all, as a non-verbal linguistic manifestation, architecture uses diverse symbols to translate tastes, styles, memories, cultural traits, predominant values in certain contexts and histories of society itself. Using them appropriately presupposes knowledge about the process of production of meanings and, consequently, great skill in the handling of symbols. It is particularly in this aspect that semiotics engages in important dialogues with architecture. Strictly speaking, the semiotic methodology proposed by Peirce (1999) imposes itself as a first-order need to interpret objects and phenomena of interest to architecture.

In Marketing, the applications of Semiotics have also been taking shape. Currently, the methodological resources of this discipline have been employed in the analysis of labels, packaging, as well as in the construction of advertising pieces aimed at attracting

the consumer. A survey carried out by Perez (2004) proves that the use of the conceptual apparatus of semiotics in marketing, aiming at the analysis of still images, especially with regard to posters and advertisements published in the printed media, began in the 60s and is well documented in the literature. It was also found that, in the following decade, interest in the application of semiotics in the area of marketing experienced a remarkable growth, influenced by the works of Foucault, Lévi-Strauss, Lacan and Barthes (PEREZ, 2004).

Confirming the universal character pointed out by Peirce (1999) and other scholars, it is observed that practically all areas of knowledge present opportunities for the application of this approach. This is due to the fact that its object of investigation encompasses all forms of language, in addition to providing methodological resources that allow analyzing the modes of constitution of any phenomenon capable of generating meanings. (SANTAELLA, 2000). In fact, the field of application of semiotics is so broad that it is confused with the universe itself, since it is permeated by an infinite number of signs that do not cease to challenge human intelligence.

## 2.2 The interface between semiotics and accounting

Conceiving accounting as a kind of language, as many scholars have done, Hendriksen and Breda (1992), Ijiri (1975), Horngren (1974), Anthony, Hawkins and Merchant (2011) and Riahi-Belkaoui (1995), it is considered that this discipline can benefit from concepts of Semiotics to improve the process of production and communication of accounting information. This reasoning is based on the fact that accounting corresponds to other types of language, especially with regard to syntactic, semantic, and pragmatic rules. For Hendriksen and Breda (1992), from this point of view, it is possible to formulate the following questions about the messages that make up accounting disclosure: a) What effect will the words used by accounting have on the users of accounting information?

b) What meaning will such words have for them, if any?

c) Do words connect in a logical sense? As can be observed, each of these questions falls within the theory of signs, classified by Morris (1976) into the following subdivisions: a) pragmatics – studies the effect of signs on individuals; b) semantics – deals with the relationship between signs and the objects they denote, focusing on meaning; c) syntactics – studies the relationships of signs with other signs, that is, how they combine to form other signs.

Applying the principles of semiotic theory described by Morris (1976) to accounting, Mason and Swanson (1981) state that measurement can be seen as a quantitative sign, given that it uses numerals to represent certain properties associated with a particular event or object. Referring to the link between the assumptions of semiotic theory and the measurement process employed in accounting, these authors affirm that measurement applicable to managerial decisions pertains to the pragmatic dimension, as it opens up space to question how well numerical signs relate to the objectives of users of accounting information. Barbosa, Klein, Colauto, and Beuren (2014) conducted a study on the language used in works published in Brazilian journals and found that the semiotic three-dimensionality advocated by Morris (1976) has been adopted as a methodological resource in several studies, although a predominance of semantic and pragmatic approaches was observed.

Ijiri (1975) also sees accounting measurement as a special language that represents real-world phenomena by

means of universally recognized symbols as numbers. This author states that the main objective of this language is to communicate certain properties of economic events that affect the entity's equity situation. In this same work, Ijiri (1975) points out that comprehensibility is an attribute of fundamental importance for the information generated by accounting to fulfill the objectives for which it is intended. In metaphorical language, he seeks to highlight the importance of comprehensibility, stating that without this quality, the symbols used in evidence are comparable to food that cannot be swallowed, to a clock that does not indicate the time, or even to a car that cannot move. As observed, in these terms, the author is referring to the semantic dimension of accounting disclosure, which also finds in semiotics theoretical-methodological parameters for its evaluation.

Etheridge (1991) suggests using semiotic theories to gain a better understanding of the characteristics of the accounting information communication process, thus enabling a more precise evaluation of its semantic, syntactic, and pragmatic dimensions. In his work entitled *An Examination of Semiotic Theories of Accounting Accruals*, this author warns that accounting information can be compromised by noise, represented by errors and manipulations of disclosure mechanisms, or by problems associated with the message recipient, such as lack of communication experience, insufficient knowledge of the message source, and lack of understanding of the context in which the communication takes place.

Aiming to investigate problems of comprehensibility and readability of accounting evidence, several studies have been carried out in recent years, at the national level, with the support of semiotic theories. Examining studies of this nature, Gouveia (2010) found that many propose the use of semiotic and communication theories not only regarding the numerical information that makes up the accounting disclosure, but also with regard to the terminology, texts, graphs and images used in the statements and other disclosure instruments. Emphasizing that problems of comprehensibility of accounting information can negatively impact decisions, Telles (2018) uses concepts from Semiotics to verify how readability impacts the comprehensibility of information contained in Explanatory Notes. Problems associated with the comprehensibility of accounting information were also investigated in the light of semiotic theories by Dias Filho and Nakagawa (2001). These and other works developed in Brazil were inspired by pioneering studies carried out in the Accounting Department of the University of São Paulo (FEA/USP), with support from the Foundation Institute for Accounting, Actuarial and Financial Research (FIECAFI), under the guidance of professors such as Eliseu Martins, Masayuki Nakagawa and Sérgio de Iudicibus.

Internationally, several decades of work have proposed the use of methodologies derived from semiotics to investigate problems related to accounting disclosure, particularly regarding readability and comprehensibility. One of the most widely disseminated is the seminal study by Bedford and Beladouni (1962), which became notable for proposing a general methodology to evaluate the communication process in accounting in its semiotic dimensions: syntactic, semantic, and pragmatic. Several authors, such as Schmutte (1983), Hendriksen (1977), and Most (1982), refer to Bedford and Beladouni's proposal as a pioneering effort that deserves to be considered in the evaluation of the communication process of accounting information.

The initial contributions of Bedford and Beladouni (1962) were followed by the work of many other authors, including Smith and Smith (1971), Haried (1972), Oliver (1974), and Libby (1979). More recent examples of the interaction between accounting and semiotics aimed at improving disclosure mechanisms can also be found in Bloomfield (2008), Loughran and McDonald (2016), Lundholm, Rogo, and Zhang (2014), and Merkley (2014). Along the same lines, the work produced by McGoun, Bettner, and Coyne (2007), Davison (2011), Graham (2013), and Ronzani and Gatzweiler (2022) deserves mention.

### 3. Methodological Procedures

Aiming to identify the most relevant professional skills for the performance of accounting graduates in the transition from the university world to the corporate world, and what can be done in the pedagogical field to prevent and correct problems in this area, the study was divided into two stages. The first consisted of identifying the main professional difficulties faced by graduates and the relationship of these difficulties with the skills acquired during their undergraduate studies. To this end, 490 graduates from Accounting courses offered by four public higher education institutions located in the state of Bahia in 2020 were randomly selected. From this total, graduates who already had more than one year of professional experience before completing the course or who were working outside the accounting field were excluded. In the end, the sample was reduced to 442 graduates, with an average age of 26 years, representing 85% of the universe (520 graduates). Another criterion considered in the sample composition concerns the score each course obtained in the last edition of the National Student Performance Examination (ENADE), the results of which were released in 2019. In this case, only courses that obtained a score equal to or higher than three were considered, since these supposedly meet the quality criteria established by the Ministry of Education.

In order to proceed with data collection, the project was previously submitted to the approval of the Ethics Committee for Research with Human Beings. Subsequently, the graduates were contacted through the Evaluation Committee (CPA) of each educational institution involved in the research, given that this committee already systematically monitors the trajectory of this public to feed the institutional evaluation process and, at the same time, collect subsidies to improve academic and administrative activities. To better characterize the respondent, a questionnaire was applied containing socioeconomic data (occupation, income range, age, gender, complementary academic background, parents' schooling, among others). In addition, we incorporated into this same data collection instrument questions that sought to measure the degree of relevance that graduates attribute to each category of professional competence to explain their performance in the university-to-company transition. The categories of professional competencies, which appear in the statistical model as independent variables, or covariates, were: Competencies in Financial Accounting (CCF); Competencies in Tax and Labor Legislation (CLTT); Competencies in Quantitative Methods (CMQ); Communication and Expression Skills (CCE); Skills in Economics and Administration (CEA); Competencies in Psychology and Sociology (CPS). For each category of competencies, the graduate was asked to assign a grade on a scale of 1 to 10, according to the degree of importance he considers to have exercised on his professional performance

in the university-to-business transition. The dependent variable, which is sought to be explained as a function of the degree of importance attributed to each category of professional competence, is the success or failure experienced by the graduate in the transition from university to work.

Having identified the professional competencies that the graduates indicated as being the most relevant to explain their performance in the university-work transition, the second stage of the research consisted of verifying which strategies could be adopted in the academic field to reinforce the knowledge base in relation to which the graduates attributed greater importance. To this end, we interviewed members of the Structuring Teaching Center (NDE) of each educational institution responsible for the training of the graduates involved in the research. The choice to consult the components of the NDE is due to the fact that this nucleus has been a collegiate body of a mandatory nature, since 2010, in the pedagogical management of all higher education courses offered by public and private institutions (BRASIL, 2010). Among its main attributions is to ensure the interdisciplinary curricular integration between the different teaching activities contained in the curriculum, as provided for in article 2 of the Resolution of the National Commission for the Evaluation of Higher Education (CO-NAES) No. 01, of 06/17/2010.

To verify whether there is a relationship between the success or failure reported by the graduates of the Accounting course in the university-to-company transition and the competencies that were provided during their graduation, a multivariate statistical technique called Logistic Regression was used. The choice of the logistic model is due to a set of factors, among which it is important to highlight: a) compared to other dependency techniques, logical regression more easily accepts categorical variables; b) it is more adequate to solve problems involving probability estimation, since it operates with a scale of results ranging from zero to one; c) it requires fewer initial assumptions, compared to other techniques used to discriminate groups; d) facilitates the construction of models for risk forecasting; e) because it is more flexible about the initial assumptions, it tends to present more reliable results; and f) it admits metric and non-metric variables simultaneously (HAIR JR. *et al.*, 1998). The decision to operate with the logistic model was also guided by the fact that the dependent variable is dichotomous or binary in nature, i.e., it assumes one of two possible outcomes. In this case, the result is the professional success or failure experienced by the graduate in the transition from the university to the corporate world. Success was associated with number one and failure with number zero. This is an aspect of particular importance for the interpretation of the results achieved, as can be seen in the section dedicated to the analysis of the findings.

In summary, the methodological track of the research unfolds in two stages. In the first, a questionnaire is applied to identify the difficulties faced by graduates of the Accounting Sciences course in the university-to-company transition and their relationship with the professional skills acquired during graduation. Once collected, the data were treated and analyzed with the support of Logistic Regression. Then, the results were submitted to the analysis of the teachers who make up the structuring teaching nuclei of the educational institutions to which these graduates were linked. By verifying that the greatest difficulties faced by graduates in the passage from the university to the corporate world were associated with competencies of a communicational nature, the components of each NDE

were urged to indicate strategies that they considered necessary to strengthen the student's knowledge base and prevent such difficulties.

#### 4. Presentation and Analysis of Results

Generally defined as a set of knowledge, skills and attitudes that influence most professional activities, personal competence is seen as one of the factors that affect the individual's ability to perform in the corporate environment (DUTRA, 2004). In summary, competence can be understood as a set of qualifications that make the individual able to perform a certain activity and that, at least to a certain extent, explain the success or difficulties he experiences in the professional field. In this work, we sought to identify the most relevant professional competencies to explain the performance of accounting graduates in the university-to-company transition and what strategies can be adopted in the pedagogical field to help develop such competencies, especially those of a communicational nature.

Having executed the methodological procedures described in the previous section, the next step was to verify to what extent the professional success or failure experienced by the graduate at the beginning of their career can be explained by the set of skills acquired during their undergraduate studies. To carry out this investigation, we used the following logistic model:

$$P_j = \frac{1}{1 + e^{-(b_0 + b_1 CCF + b_2 CLTT + b_3 CMQ + b_4 CCE + b_5 CEA + b_6 CPS)}}$$

Where:

1.  $P_j$  is the dependent variable, which can assume a value of 0 (zero) or 1 (one). In this study, a value of 1 was assigned to indicate success in the university-to-company transition and a value of 0 to indicate failure;
2.  $b_0, b_1, b_2, b_3, b_4, b_5$  e  $b_6$  are the parameters of the model; and
3. The covariates of the model are represented by each category of professional competence identified by the graduates as factors responsible for the performance achieved in the university-to-business transition. For each category, the graduates assigned a score ranging from 1 to 10, according to the contribution they believe each set of competencies made to their respective professional performance.
4. In the logistic model presented here, the variables are coded as follows: CCF (Competencies in Financial Accounting); CLTT (Competencies in Tax and Labor Legislation); CMQ (Competencies in Quantitative Methods); CCE (Competencies in Communication and Expression); CEA (Competencies in Economics and Administration); CPS (Competencies in Psychology and Sociology).

With the support of SPSS® software, logistic regression was performed using the "enter" method, since all independent variables were simultaneously considered, seeking to identify those with the greatest potential to explain, from a statistical point of view, the graduate's performance in the university-to-business transition. The following table shows the results of the regression:

**Table 1.** Result of the Logistics Model

		B	E.P.	Wald	gl	Sig.	Exp(B)
Step 1a	CCF	1.722	.312	30.399	1	.000	5.595
	CLTT	.215	.163	1.754	1	.185	1.240
	CMQ	-.244	.162	2.272	1	.132	.784
	CCE	.879	.150	34.477	1	.000	2.409
	CEA	.193	.125	2.386	1	.122	1.213
	CPS	.042	.151	.079	1	.779	1.043
	Constante	-14.616	2.181	44.896	1	.000	.000

a. Variable(s) entered in step 1: CCF, CLTT, CMQ, CCE, CEA, CPS.

Source: Survey data, 2020.

To verify whether each estimated parameter is valid from a statistical point of view, the Wald test was used. This is a mechanism equivalent to the *t-test*, whose objective is to test the null hypothesis that a given regression coefficient is not significantly different from zero. As can be seen, of the variables considered, only two have a significant effect on the probability of the graduate of the Accounting course experiencing success or failure in the university-to-company transition, which are: Knowledge in Financial Accounting (CCF) and Knowledge in Communication and Expression (CCE), at least at a significance level of 0.05. As expected, the variable that had the greatest impact on the performance of graduates in the transition phase from the university to the corporate world was CCF. This result is explained by the nature of the demands on graduates, not least because individuals who were not performing activities related to accounting were excluded from the sample. In second place, there is the CCE variable, assuming statistical relevance much higher than other blocks of knowledge such as administration, economics, tax and labor legislation.

It is exactly at this point that we need to stop with more attention, because disciplines of a linguistic nature do not always find space in the curriculum of Accounting courses, despite the fact that the curricular guidelines related to that course have included proficiency in the use of accounting language among the competencies required of the accountant. Now, how can we expect the accountant to become proficient in the use of accounting language or to be able to work in a team, resolve conflicts, produce and interpret reports, dialogue with stakeholders, if he does not have the opportunity to acquire, during his graduation, skills of a communicational nature? It is true that, for this, this professional also needs to gather knowledge from other disciplines such as psychology, sociology, philosophy, administration, among others, but it cannot be denied that the proper handling of such knowledge has as a basic assumption the mastery of communication skills. Examining the evaluation reports of graduates of the Accounting Sciences courses offered by the institutions that participated in this research, it is observed that the results presented above are consistent with the reality evidenced in such documents. Among the factors that the graduates pointed out as the most relevant obstacles to establishing themselves in the job market in the university-company transition phase, the following stand out: lack of experience in the area of activity, poor ability to produce technical reports, difficulty in using internal communication channels, difficulty in understanding the organizational strategy, difficulty in transmitting information and being understood by colleagues and superiors, difficulty in creating relationships necessary to obtain results, difficulties in capturing and systematizing information,

training, difficulty in mobilizing knowledge and information to adapt to new demands, difficulty in making presentations in public, difficulty in acting as a communication agent in the team, difficulty in dealing with new information technologies, difficulty in arguing and giving feedback on the results achieved.

With regard to activities of an essentially accounting nature, it was found that the main difficulties pointed out by the graduates are also related to communication skills. Among the most cited, the lack of ability to participate in the production of narrative evidences such as explanatory notes and socio-environmental responsibility reports stands out. Others pointed out difficulties in understanding various types of documents, such as reports of the Board of Directors, minutes of the Fiscal Council, audit opinions, expert reports, technical pronouncements and decisions handed down by the tax authorities. There was also a certain mismatch between the reality that the graduates said they faced in the university-to-company transition and the expectations that encouraged them to opt for the Accounting Sciences course. Revealing a lack of knowledge about the relationships that are naturally established between practice and theory, about 40% of the respondents even expressed surprise at the demands to which they were subjected at the beginning of their careers. This group expected that professional demands would be more circumscribed to the universe of activities that are conventionally called accounting practices, such as the recording of economic events and the production of statements.

Once the factors that exert the most influence on the In the performance of the graduates of the Accounting Sciences Course in the transition from the university to the corporate world, we submit such results to the appreciation of the Structuring Faculty Centers. As previously mentioned, in this particular the objective was to identify strategies that can be adopted in the academic sphere to reinforce the knowledge base that is most relevant to the student's success in the university-to-business transition. In order to broaden and strengthen the competencies of a communicational nature, the members of the Structuring Teaching Centers recommended that disciplines in the area of linguistics, such as Instrumental Portuguese and Applied Semiotics, be incorporated into the curriculum of the Accounting Sciences course. It is believed that such disciplines have the potential to help students develop basic linguistic skills in oral and written textual production, as well as the ability to understand and argue. This proposal is based on the idea that communication is at the basis of all areas of knowledge and imposes itself as an essential condition for human interactions to take place and be strengthened, including in the world of professions.

Assuming that Accounting is a kind of language, considered by many authors as a universal language,

As mentioned earlier, and considering that Semiotics is dedicated to the study of all languages, the Structuring Faculty Nuclei suggested that the national curriculum guidelines of the Accounting Sciences course consider the possibility of recommending the introduction of the Semiotics discipline in the teaching of Accounting throughout the country. In doing so, the experience of other undergraduate courses such as Medicine, Mathematics, Law, Pedagogy, Architecture, Nursing and Marketing is also taken into account. Each of these, according to its characteristics and objectives, draws from semiotics methodological subsidies to guide and evaluate certain practices, such as, for example, interpretation of symptoms and signs associated with certain pathologies, construction of advertising campaigns, analysis of the internal structure of the text and its external components, translation of memories and cultural traces into architectural symbols, investigation and interpretation of legal phenomena, and so on.

In Accounting, Semiotics can offer relevant methodological resources for the improvement of disclosure mechanisms, contributing significantly to the identification, measurement and communication of economic events that impact the assets of entities. This is to say that Semiotics has the potential to help us deal with three major fundamental problems in accounting. In addition, as this discipline has historically been treated as a process of communication of economic and financial information, the contribution of semiotic knowledge to the training of accountants can make them more intellectually equipped to deal with problems of syntactic, semantic and pragmatic nature associated with accounting evidence. With a better understanding of syntactic problems, it is considered that the accountant would be in a better position to verify whether the rules and linguistic codes adopted in accounting disclosure are articulated in a logical sense. With regard to problems of a semantic nature, this professional would be better able to evaluate whether the codes used in the representation of economic events are understandable and express a valid relationship between them. Finally, from the pragmatic aspect, it is understood that the accountant would be better equipped to adapt the accounting information to the objectives of its recipients.

## 5. Final Considerations

In practically all studies that explore the relationship between professional skills and the labor market, highlight Socioeconomic transformations that are generating new opportunities for the accountant, but also great challenges. The time is becoming increasingly distant when this professional could dedicate himself almost exclusively to the recording of economic transactions that affect the assets of entities and to the production of accounting reports. Currently, it is considered that this professional spends less time in the construction of such reports and dedicates himself more and more to the analysis and interpretation of accounting information. The question to be clarified is whether the training provided to this professional facilitates the development of skills and abilities that allow him to fulfill this role safely and adapt to the new demands of the labor market. This presupposes the mastery of a multidisciplinary set of knowledge that enables him to understand and solve problems, lead teams, relate to investors, dialogue with customers and suppliers, mitigate conflicts, motivate people, deal with new technologies, interpret scenarios, manage risks and so on.

In view of this trend, and considering that many graduates of the Accounting course face difficulties in their first professional experiences, this research sought to identify which competencies are most relevant for the accountant's performance in the transition process between the university and the market

as well as to analyze how the contribution of Semiotics to the teaching of Accounting can contribute to its development. By carrying out the procedures described in the section dedicated to the methodology, it was found that the main difficulties faced by graduates in the university-to-company transition are related to communication skills. By way of example, we mention: poor ability to produce and interpret technical reports, difficulty in transmitting information and being understood by colleagues and superiors, difficulties in capturing and systematizing information, difficulty in making presentations in public, difficulty in arguing and giving feedback on the results achieved, difficulty in understanding explanatory notes and reports on socio-environmental responsibility, difficulties in understanding various documents, such as minutes, audit opinions and reports of the Board of Directors.

Noting that such difficulties are related to communication skills and competences, the NDE of each course that participated in the research suggested the insertion of the discipline Semiotics Applied to Accounting in the curriculum of the Accounting Course. It was assumed that Semiotics can help future accountants to understand and evaluate the syntactic, semantic and pragmatic dimensions of accounting information, since accounting has been widely conceived as a business language. With this resource, it is considered that the aforementioned professional would be better able to understand that accounting data can only be useful to the extent that they faithfully represent the relevant properties of the economic events they seek to represent. This also means that semiotics enables a better understanding of the limitations of accounting information itself. After all, as a result of individual perceptions and interpretations, even if guided by normative parameters, such information may fail to contemplate relevant attributes of economic objects or events. It is understood that the contribution of Semiotics to the teaching of Accounting can contribute to avoid problems of this nature, providing the accountant with methodological resources to identify the relevant attributes of economic events, measure them and evidence them adequately.

In addition, by understanding the mechanisms of semiosis, It is tended that the accountant can become more judicious in the use of accounting language, recognizing that the symbols used in the disclosure do not carry meanings in themselves. Based on semiotic knowledge, this professional would be better prepared to perceive that meanings result from an interpretative process, conditioned by multiple factors, such as the previous experiences of the users of accounting information, the social norms of the environment in which they work, the sociocultural context of which they are part, their cognitive references, as well as the relationship between their objectives and the information made available, among other elements. Thus, by adding more quality to accounting disclosure instruments, it is considered that the entire society tends to benefit, since accounting can contribute to improving corporate governance arrangements, strengthening *accountability instruments*, helping to build a more reliable business environment, facilitating access to capital and increasing the competitiveness of organizations.

The contributions that Semiotics has offered to the advancement of different areas of knowledge and, in particular, to the resolution of issues related to the communication process, reinforce the expectation that its insertion in the teaching of Accounting can, in fact, expand the set of skills of the future accountant and reduce the difficulties faced in their first professional experiences. However, considering that the scope of this research was restricted to four higher education institutions in a single state, it is recommended that future studies be carried out in other Federation Units, covering a larger number of students and institutions.

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